Appl. No. 10/587,701

Amdt. Dated February 22, 2010

Reply to Office action of 21 August 2009

Atty. Docket No. AP893USN

Amendment to the Specification

Amend the paragraph beginning at page 14, line 10 as follows:

Referring to Figure 1, an array antenna receiver system for receiving signals from a plurality of user transmitters (not shown) comprises an array antenna having a plurality of antenna elements, specifically N elements 22/1, ..., 22/N, each coupled to a respective one of a corresponding plurality of RF front-end processing units 26/1, ..., 26/N of an RF receiver section 26, which units treat the signals from the antenna elements to produce N antenna signals x_1 , ..., x_N , respectively. Each of the RF front-end units 26/1, ..., 26/N has its output coupled to the input of each of a set of M+1 filters, specifically subspace filters, 40/0, ..., 40/M, of a common preprocessing section 40. Each of the subspace filters 40/0, ..., 40/M is matched to a respective one of an ensemble of M+1 transmitting users, and has its output coupled to the input of each of a corresponding plurality of user-specific signal processors 60/0, ..., 60/M of a signal processing section 60. Each of the signal processors 60/0, ..., 60/M processes the respective set of the basis, specifically subspace, signals y_0 , ..., y_M of the subspace filters 40/0, ..., 40/M, respectively, to produce a corresponding one of a plurality of estimates z_0 , ..., z_M of the signals s_0 , ..., s_M transmitted by the M+1 users. --